2015

City of Cody Electrical Division

ELECTRICAL DISTRIBUTION STANDARDS MANUAL

ADOPTED BY CITY COUNCIL _____

Index

Section I
General Information

10.03 Purpose

This booklet is to aid in providing electric service for new or remodeled structures as well as subdivisions and other major projects. While this book should answer most questions, you may contact Cody's Electrical Division for further assistance. The appropriate phone numbers and contacts are:

City of Cody Electrical Engineer – 527-7511
City of Cody Electrical Superintendent – 587-6803
City of Cody Building & Electrical Inspector – 527-7511

The word "Utility" as used in this booklet shall mean the City of Cody Electrical Division. The word "Customer" shall mean the resident, building owner, contractor or developer requiring electrical service.

1.02 Codes and Ordinances

The construction of new or remodeled electrical installations must conform to applicable provisions of the National Electrical Code, the National Electrical Safety Code, the State of Wyoming Electrical Safety Division regulations and the City of Cody ordinances and codes.

1.03 Changes or Conflicts in Requirements and Guidelines

The governmental codes and ordinances in Section 1.02 are the basis for some information in this booklet. It is the intent of these guidelines and requirements to follow all applicable codes, ordinances and regulations. If a conflict arises, the appropriate code, ordinance or regulation will supersede the interpretation offered in this booklet. These requirements are subject to change if the governing codes, ordinances or regulations change. The Utility does not assume the responsibility for keeping this booklet current. In case of doubt on the applicability of any item, one should consult the Utility.

When this booklet uses the phrase "consult utility," it shall mean for every installation, not a single contact.

1.04 Application for Service

The Customer must provide the Utility with accurate load information and the requested service date as early as possible. Requests for service to commercial and industrial Customers normally require 60 days planning by the Utility to serve the load. Installations requiring transformers or

other equipment not in stock may require six months lead time or more. Consult the Utility for service dates for your installation.

For commercial, industrial or residential subdivisions, mobile home parks, and apartment complexes, the requests for service shall include a City Council approved plat. Such plans should show preferred service and meter locations and a single line diagram of the electrical layout. The request must show all load information, including lighting, receptacle, water heating, cooking, electric heat, air conditioning, and motor load. The Customer must provide sufficient information on equipment operations to establish the kilowatt demand of the load.

The Utility has a staff available for advice on Distribution Standards and problems related to electric energy use for new, existing and reconstructed installations. The Customer and the Contractor are liable for any damage to Utility equipment or personal injury unless they give adequate notice to the Utility and receive approval from the Utility for the change or addition.

When conditions arise during construction that requires changes in service arrangements, the Customer must consult with the Utility to negotiate satisfactory alternative arrangements. Communication with the Utility will afford you this service.

1.05 Types of Service Furnished

Electric service available is 60-hertz, alternating current, single or three phase. Nominal secondary voltages available by overhead or underground distribution lines in the service area are as follows:

- Single-phase, 120/240-volt, 3-wire, grounded
- Three-phase, 208Y/120-volt, 4-wire, grounded wye
- Three-phase, 480Y/277-volt, 4-wire, grounded wye

Under certain conditions, the Utility will provide single phase, 120/208-volt, 3-wire grounded service, single-phase, 240/480-volt, 3-wire, grounded service, or three-phase, 240/120-volt, 4-wire, grounded delta service. Again under certain conditions, the Utility will supply primary delivery at the distribution voltage standard for the requested service location. All service provided by the Utility is subject to the terms and conditions specified in later sections of this manual.

1.06 Approval for Service

City of Cody ordinances require a Customer to obtain a permit before the Utility provides service. In addition, State of Wyoming Statutes require that the electrical inspection authority (in this case the City of Cody Building Inspector) approve the installation before it is energized.

1.07 Permanent Service Connection

Only authorized Utility employees shall make the permanent connection or disconnection of the Utility's electric service to a building or structure.

10.03 Seals

The purpose of seals placed by the Utility on meters and associated service equipment is to prevent injury or tampering.

Under normal circumstances, only the Utility can remove seals. If an emergency requires seal removal before notification, the person responsible must notify the Utility as soon as possible. The Utility can then inspect the installation and replace the seal.

Section II
Services

2.01 General

The location of the service entrance on the Customer's premises is an important consideration to both the Customer and the Utility. The installer shall locate the service entrance to make the meter and service easily accessible from the Utility distribution lines (refer to the figures on pages 8 & 12). The service entrance shall be convenient for the installation, operation and maintenance of Utility meters and equipment. **The Customer shall consult the Utility for designation of the point of attachment for overhead service drops, underground service laterals, preferred meter and service locations, required current transformers, and terminal cabinet enclosures.** The Customer shall contact the Utility if variations from these designated locations are desired.

The Customer will provide and install all service equipment, including service laterals (conduits & conductors), compression lugs for attachment to transformers, switches, service entrance conductors, raceways, enclosures, and meter sockets, and will further provide right-of-way and space for the installation and maintenance of the Utility facilities. Customer provided service laterals must be installed to City specifications.

The point of attachment for service laterals will be the point at which Utility installed equipment and Customer installed equipment connect. For all services, that point of attachment is where the service lateral conductors connect to the Utility transformer or pedestal. The Customer-provided conductors that run into the transformer shall be cut three feet above the transformer secondary bushings to provide sufficient length for replacing transformers.

Normally, service to a building will be through one set of main service conductors of the same voltage classification. The Utility may tap these main service conductors where more than one meter installation is necessary in a building of multiple occupancies. For either residential or commercial services, an outside disconnect must be provided for emergency situations.

Where two or more meters are grouped, each meter position must be clearly and permanently marked by means of a metal or hard plastic engraved type label. Such marking will indicate the particular location or address that it supplies. Service will not be established until the marking is completed.

Un-metered service wires and metered load wires will not be run in the same conduit, raceway or wire gutter.

For overhead service masts, the minimum conduit size shall be 2" GRC conduit with an appropriate weather head.

2.02 Point of Delivery

The point of delivery shall be the point of attachment as defined in section 2.01 above. The exact location of said point of delivery shall be at the Utility's discretion. The Utility shall separately meter and bill any additional service to the same Customer at other points of delivery at a different voltage or phase classification.

2.03 Sealing of Cabinets and Gutters

All cabinets and gutters containing unmetered conductors, other than mainline switches required by applicable electrical codes, must be arranged for sealing with the Utility's seal. Removable conduit fittings may be installed between the service outlet and the meter when approved by the Utility. These fittings must be visible from the meter location or from an exterior ground position and must be arranged for sealing.

2.04 Power Quality Interference

If it is determined that a Customer's equipment is causing interference, excessive harmonics or other power quality issues with the Utility's system, it is the Customer's responsibility to diagnose and correct the problem. If the problem is not corrected in a timely manner, the Utility reserves the right to disconnect service to the Customer until the power quality issue is corrected by the Customer.

2.05 Service Repair Responsibilities

For residential services, the City shall be responsible for the repair of the service drop or lateral in case of an outage. Form Commercial services, the Customer shall be responsible for the repair.

Section III
Temporary Construction Distribution Standards

3.01 General

Upon request, and with application, the City of Cody will supply temporary service at a location adjacent to the City's facilities. Application for service and appropriate fees shall be paid at City Hall before said service will be given. An electrical permit is also required before hook up will be done.

Always locate temporary services for construction work to protect the meter from accidental damage, and, when practical, in a location usable throughout the entire construction period. If several homes will be built from one temporary service that temporary service should be given the address of the last home to be built. If a temporary service must be moved, a new application is needed.

3.02 Requirements – Overhead:

- To ensure strength, the pole or post must be at least butt treated and free from any visible defects.
- The pole or timber shall be no less than 20 feet long planted 5 feet in the ground. More ground clearance may be required if service will cross traffic areas.
- The ground rod shall be visible when inspection is made.
- Guying may be required – consult City Engineer
- Meter to be no more than 6' from ground line with a main disconnect.

3.03 Requirements – Underground

- Post must be long enough to be firmly planted in the ground.
- Locate close to an existing pad mounted transformer or secondary pedestal with enough cable tails to extend inside said facilities.
- Ground rod shall be visible when inspection is made.
- Meter to be no more than 6' from ground line with a main disconnect.

3.04 Meter Socket Requirements for Temporary Construction Services

Temporary Construction Service	Meter Socket Type
Single phase, 120/240 V 200amps or less	4-Jaw
Single phase, 120/208 V 200 amps or less	5-Jaw
All other temporary services	Consult the City of Cody

Section IV
Residential Meter Installations

4.01 Residential Meter Socket location – overhead installation

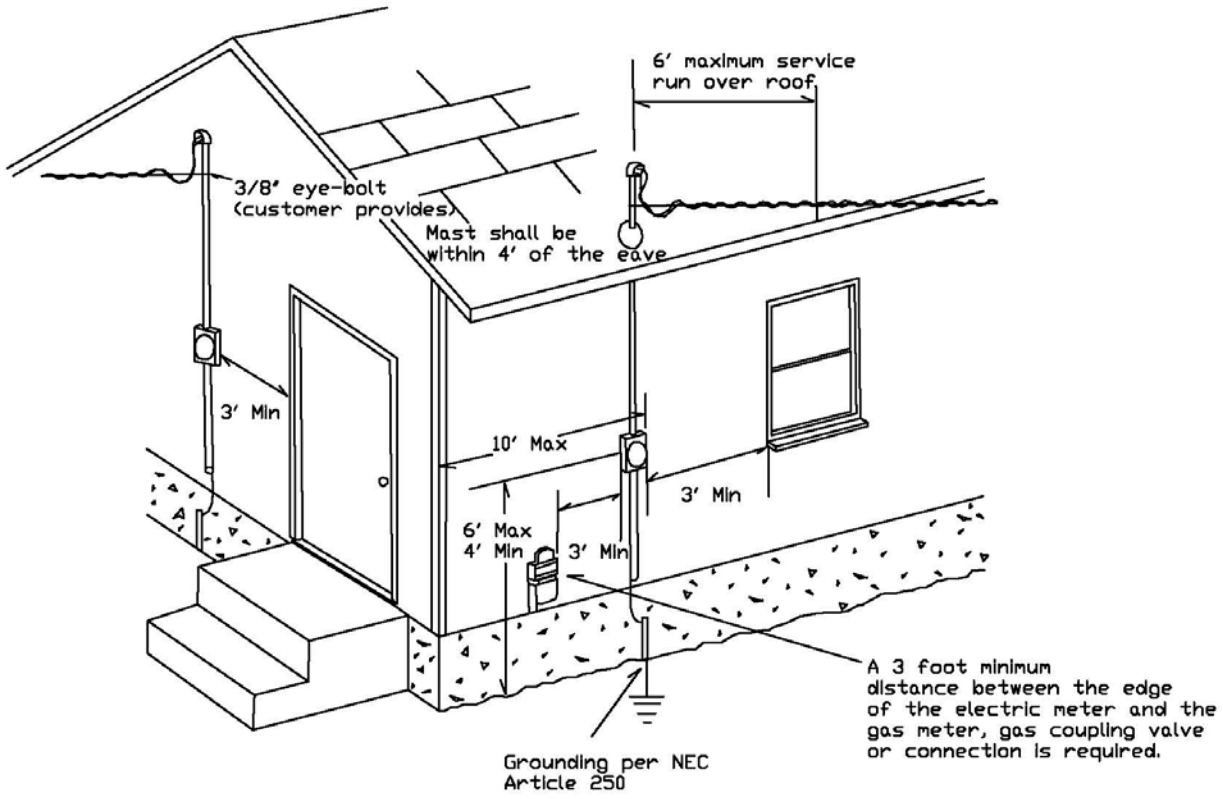
The City of Cody will determine the exact location of meters that do not meet the criteria established in this manual. If the Customer is unsure whether the meter location is acceptable, the City of Cody should be contacted. **It is highly recommended that the City be consulted prior to establishing the final meter socket location.** The location of the service entrance on the Customer's premises is an important consideration. Distance and accessibility to the City's existing facilities is an important factor to consider as well as ready access to the meter for meter maintenance and replacement. **Consult the City to determine the point of attachment for overhead service drops.** In all cases, the minimum service mast riser conduit size shall be 2" GRC conduit.

Install residential meter outdoors at a location acceptable to the City of Cody. Meters must not be installed within three feet of windows. It is recommended that the location avoids exterior walls that are likely to be fenced in. Never install the meter over window wells, steps in stairways, or in other unsafe or inconvenient locations. Keep shrubs and landscaping form obstructing access to the meter.

The figure on the next page shows where a residential meter socket should be located. Clearances shall meet appropriate codes.

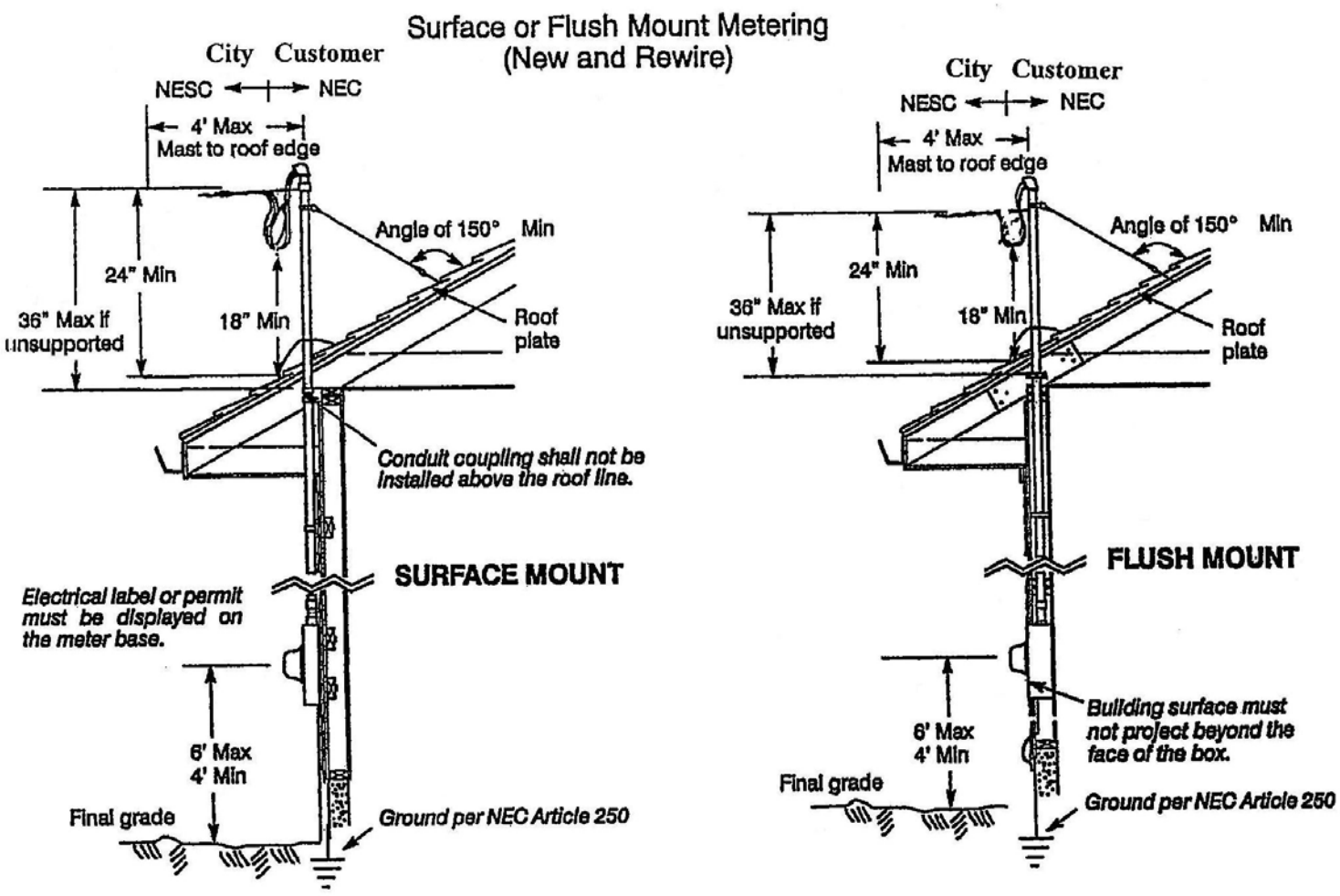
In general, overhead residential services shall meet the following requirements:

- Service mast must be a minimum of 2" GRC conduit with an appropriate weather head.
- An outside disconnect means must be provided.
- The City must be consulted before determining the final meter socket location to insure that it is accessible from the nearest point of attachment to the City's electrical system.
- The meter socket must be located between 4' and 6' of finished grade.
- The meter socket must be located a minimum of 3' from a window (including egress windows) unless prior authorization is received from the City Electrical Engineer.



Residential Meter Socket Location
Overhead Installation

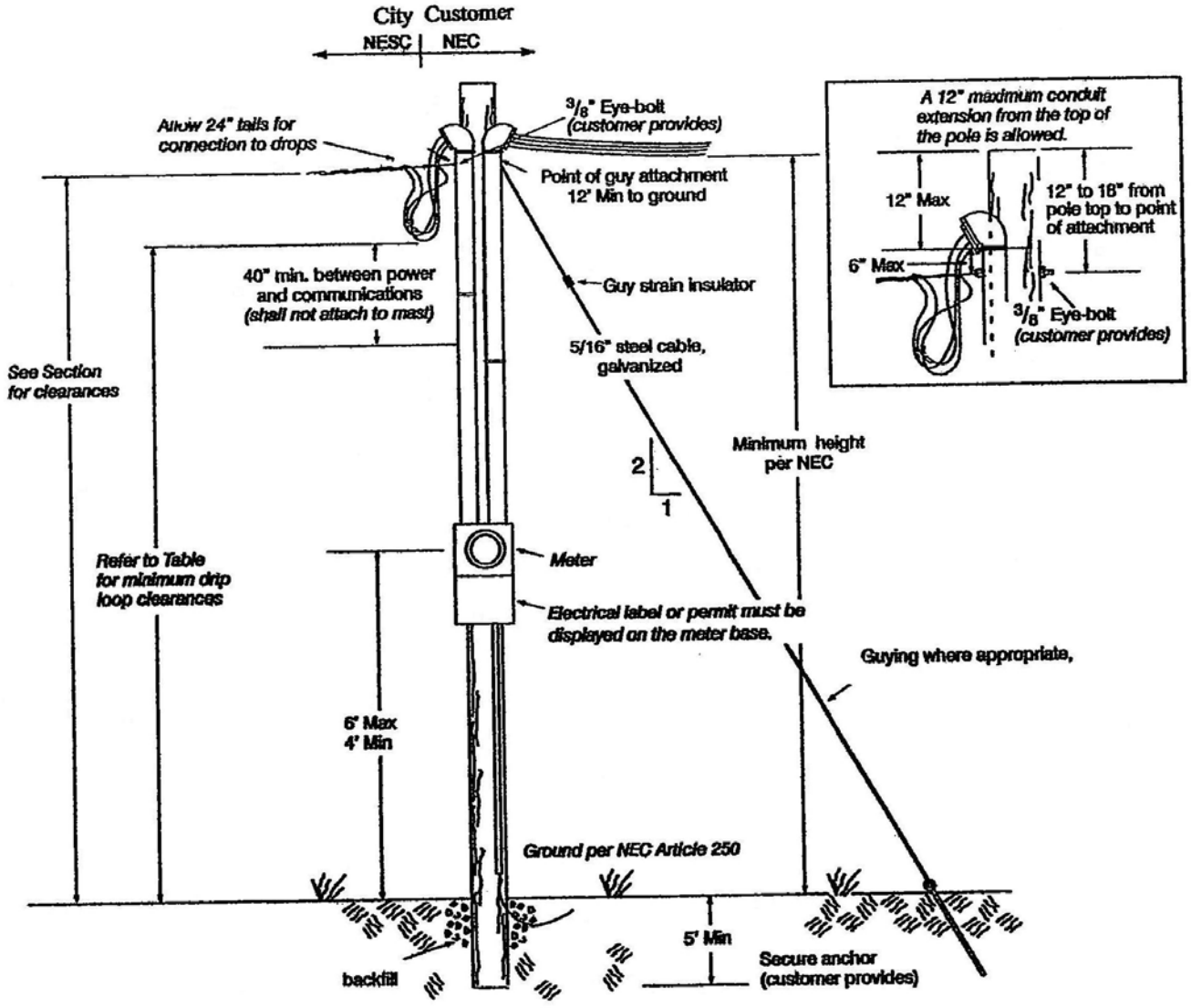
Single Family Overhead Service Detail



NOTE:

1. Allow 24” conductor leads for connection to service drops
2. Appropriate guying required for long services or taller masts
3. The service mast must be minimum 2” GRC conduit with an appropriate weatherhead. This must be provided and installed by the Customer.

Single Family Overhead Service Detail – Pole attachment



NOTE:

1. Allow 24” conductor leads for connection to service drops
2. Appropriate guying required for long services - Contact City for requirements
3. The service mast shall be a minimum of 2” GRC conduit with an appropriate weatherhead. This shall be provided and installed by the Customer.

4.02 Residential Meter Socket location – underground installation

The City of Cody will determine the exact location of meters that do not meet the criteria established in this manual. If the Customer is unsure whether the meter location is acceptable, the City of Cody should be contacted.

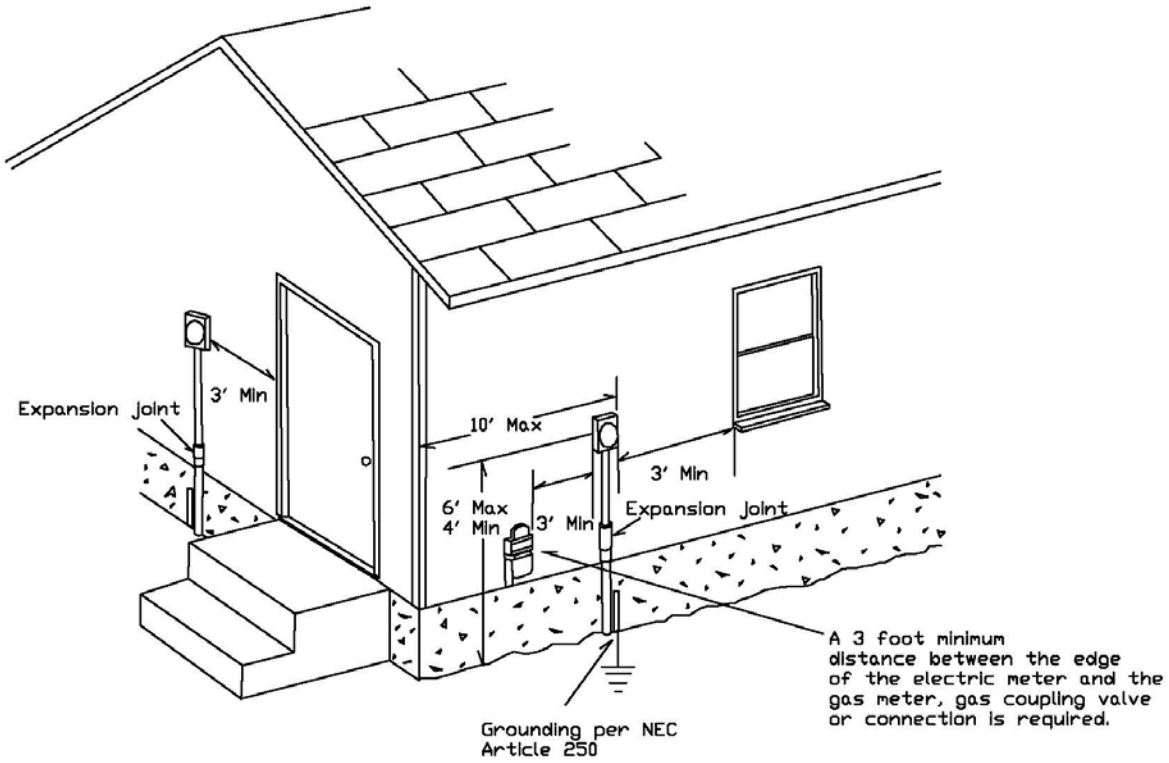
The location of the service entrance on the Customer's premises is an important consideration. Distance and accessibility to the City's existing facilities is an important factor to consider. Consult the City to determine the point of attachment for underground service laterals. The City of Cody has both front lot line facilities and alley facilities so contacting the City is important prior to installation. In an underground subdivision, the source of power for each lot has been predetermined in the initial layout. Any changes required could mean additional costs to the Customer.

Install residential meter outdoors at a location acceptable to the City of Cody. Avoid installations near windows or exterior walls that are likely to be fenced in. Never install the meter over window wells, steps in stairways, or in other unsafe or inconvenient locations. Keep shrubs and landscaping form obstructing access to the meter.

The figure on the next page shows where a residential meter socket should be located. Clearances shall meet appropriate codes.

In general, residential underground service equipment must meet the following criteria.

- The City electrical engineer shall be contacted before determining the final meter socket location to insure it is accessible from the nearest point of attachment to the City's electrical system.
- The conduit riser to the meter socket shall be provided with an expansion joint to allow for trench settling. This also applies to commercial services.
- Refer to Section V for conduit sizes and depths.
- The meter socket shall be located a minimum of 3 feet from a window (including basement egress windows.



Residential Meter Socket Location
Underground Installation

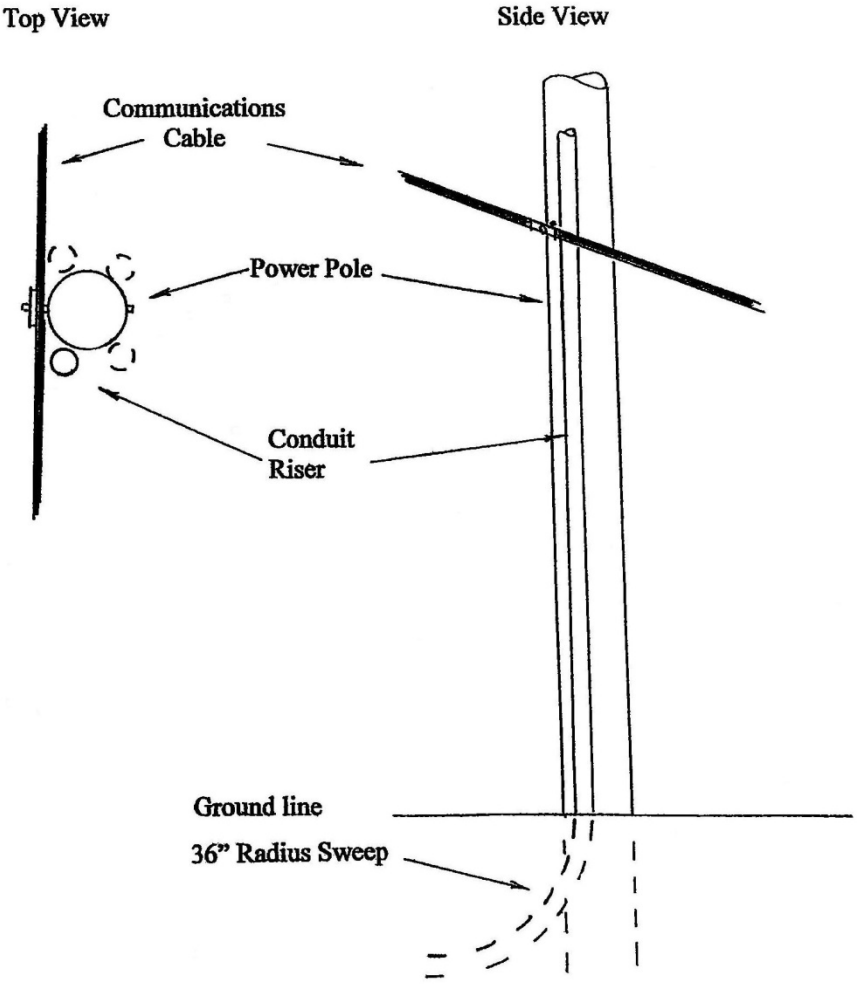
Section V
Conduit Requirements / Placement

5.01 Secondary Voltage (service lateral) Conduit:

- Minimum two foot trench depth required
- 100 amp service – 2" conduit with 36" radius sweeps and expansion joint
- 200 amp service – 3" conduit with 36" radius sweeps and expansion joint
- 200 + amp service – 3" conduit with 36" radius sweeps and expansion joint
- Placement of meter base to be approved by City of Cody Electrical Division
- Placement of conduit for a pole riser shall be on the pole quarter to avoid conflict with any communication cables that may be on pole. If riser is in a traffic path it will require the first joint to be GRC. See drawing below
- All conduit shall be grey, electrical grade, schedule 40. When Customer furnishes the conduit, they will also furnish all straps and weatherhead for the riser.

5.02 Distribution Voltage Conduit:

- Minimum four foot trench depth required.
- All conduits shall be electrical grade schedule 40 PVC.
- All conduit sweeps shall be minimum 36" radius sweeps
- Customer provided conduit shall meet City specifications



Section VI
Non-Residential Services
(Commercial, Industrial)

This section describes the City of Cody's requirements for non-residential services. This section covers single-phase and three-phase services for direct-connect and instrument rated sockets for meters. **Customer is responsible for any single phase protection on three phase installations.** All non-residential Customers are responsible for coordinating Distribution Standards with the City prior to material purchase and installation.

Any exceptions to the metering requirements shall be approved in writing by the City of Cody prior to installation.

6.01 Service Point Location for Meter and Equipment

The service point refers to the location where the City's circuit connects to the Customer's system. Meters and metering equipment shall be located outdoors. All services, either residential or commercial shall be readily accessible and have an outside disconnecting means.

Meters shall not be installed on a drive-through service entrance side of a building. If equipment is installed in a traffic area, it will be the Customer's responsibility to provide barrier posts for the protection of electrical equipment.

6.02 General Descriptions

Direct Connect Services (120 to 480 volts):

- Single-phase services of 400 amps (320 amps continuous).
- Three-phase services of 200 amps (160 amps continuous).

Instrument Rated Services (120 to 480 volts):

- Single-phase services over 400 amps (320 amps continuous).
- Three-phase services over 200 amps (160 amps continuous).

Switchboard type meter cabinets may be required in high amperage situations where multi-conductors are required. If more than 12 secondary service conductors are required from the transformer to the meter equipment, a secondary connection cabinet shall be required.

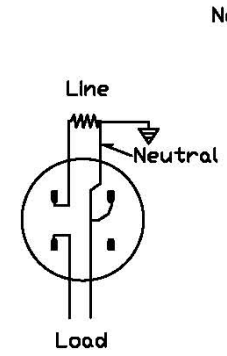
6.03 Direct Connect Services

The City of Cody requires a direct-connect meter socket (with manual by-pass) when the ampacity of a single-phase service entrance is 400 amps (320 amps continuous) or less, or when the ampacity of a three-phase service is 200 amps (160 amps continuous) or less.

Meter sockets shall be furnished, installed, and wired by the Customer/electrician.

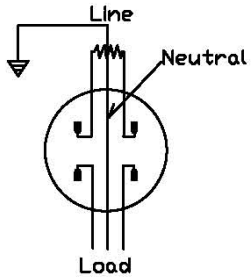
Meter Socket Connection Diagrams
(Direct Connect)

Single Phase Connection
Front View



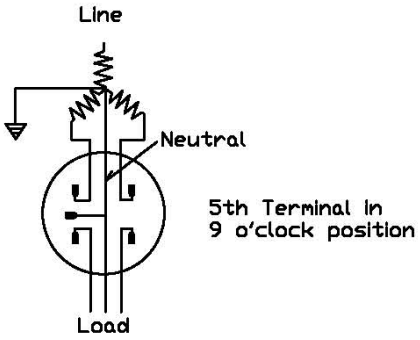
120 V - 2 Wire

1S



120V/240V - 3 Wire

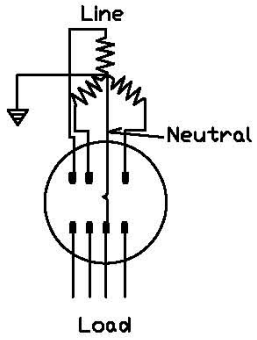
2S



120/208V - 3 Wire WYE
Network Meter

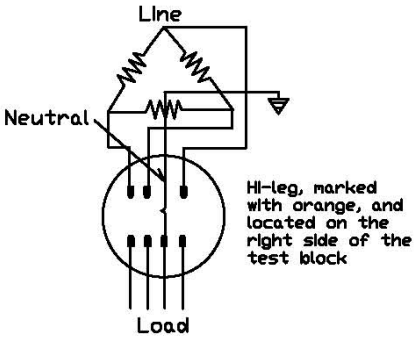
12S

Three Phase Connection
Front View



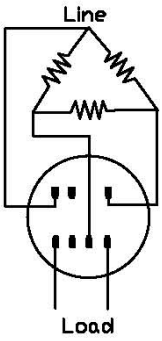
120/208V - 4 Wire WYE
277/480V - 4 Wire WYE

16S



120/240V - 4 Wire Delta

16S



240 or 480V, 3 - Wire Delta
(not for new construction)
Configured for EUSERC 304/305 Note 12

16S

6.04 Instrument rated services

The City of Cody requires a Customer supplied and installed wall mounted CT cabinet with sufficient space on the unhinged side for the remote metering socket (see drawing for required size and installation instructions). Switchboard type meter cabinets may be required for higher amperage, multi-cabled services.

Current Transformer Mounting Base Requirements
For Installation in a Current Transformer Cabinet

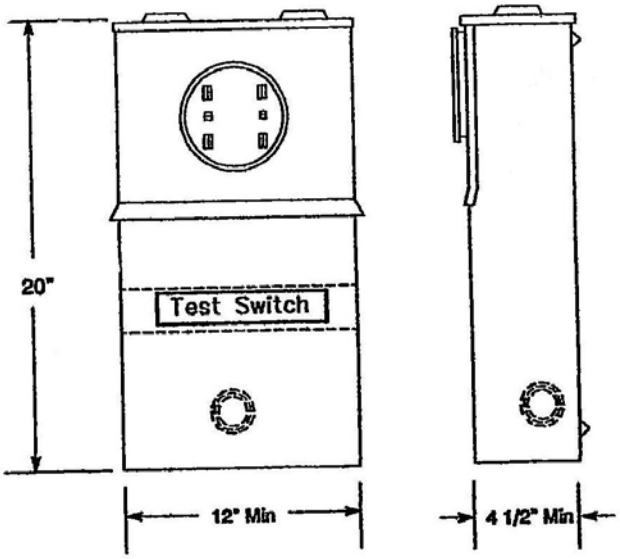
- The mounting base for CT's shall meet the ratings for the available fault current (50,000 A minimum)
- For 4-wire delta services, the high (voltage) leg conductor must be identified by orange tape, and located on the right hand side of the CT mounting base.
- The mounting base shall accept bar-type current transformers only.

Cable Terminations:

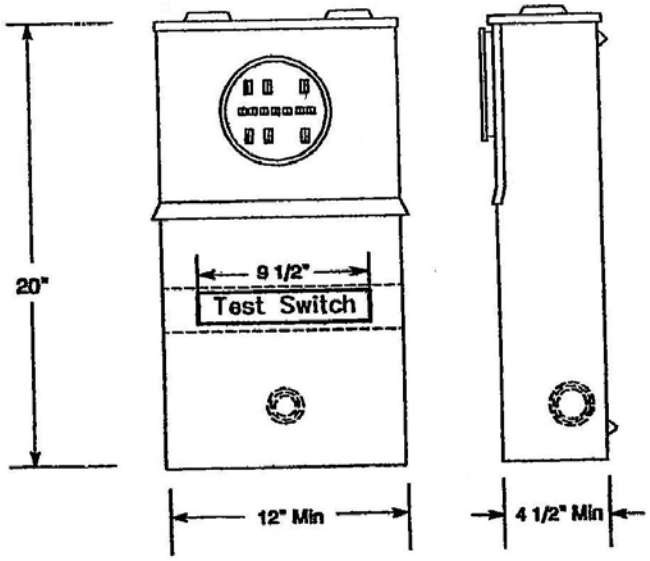
- Line and load-side terminations on CT landing pads require two bolts per connector. Line Side and Load Side Conductors shall be clearly labeled by the customer or contractor.
- The Customer shall provide and install all connectors to attach the line and load side conductors to the current transformer mounting base. The Customer shall provide and color code all conductors for these connections. For attachment of the service lateral conductors to the City distribution transformer, the Customer shall provide the connectors and the City will install and attach the service laterals to the City transformer. If the number of conductors supplying the Customer's service equipment from the transformer exceeds 12 individual cables, the Customer shall provide a secondary connection cabinet generally referred to as a "Scott Box". The City will make the connection between the secondary connection cabinet and the transformer and the Customer will make the connection between the secondary connection cabinet and the building service equipment.
- On overhead services, the Customer shall furnish all lugs and connect conductors to the line and load terminals of the current transformer mounting base. The Customer is responsible for bringing the service entrance conductor to the connection of the utility service drop. No alteration of the transformer mounting base is allowed.

Current Transformer Meter Socket – Pre-Wired
Requirements and Types
1 Phase/3 Phase
Customer Provided

Single Phase – 6 Jaw



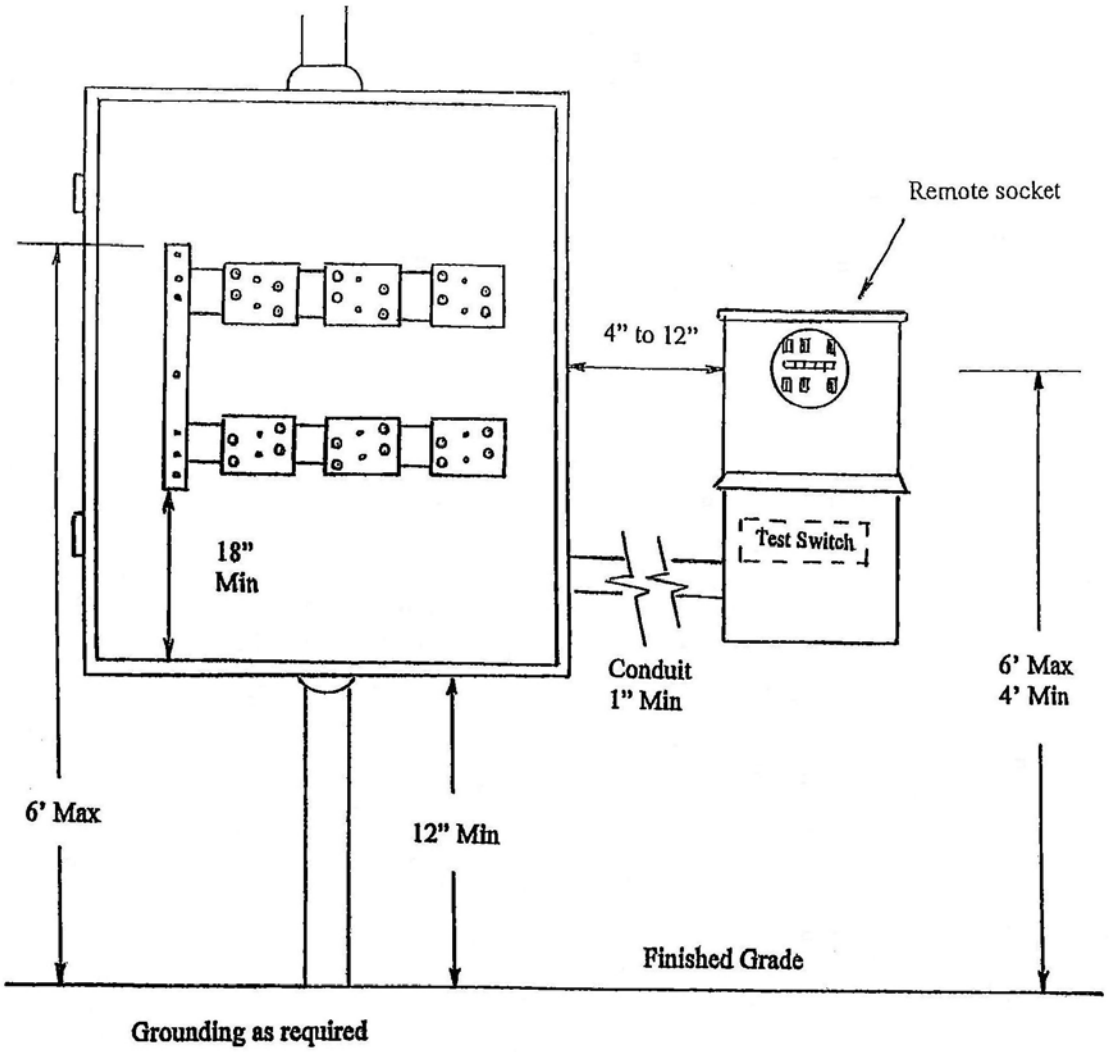
Three Phase – 13 Jaw



Type of Service	Socket Type
120/240 volt, single-phase, 3 wire	6 jaw
120/208 volt, three-phase, 4 wire	13 jaw
277/480 volt, three-phase, 4 wire	13 jaw
240/120 volt, three-phase, 4 wire	13 jaw

Note: Milbank 3 Phase Socket #UC7461-YL-TGE-DES, ringless with two-piece cover, test switch pre-wired. Single Phase Socket #UC7637-YL-TGE-DES.

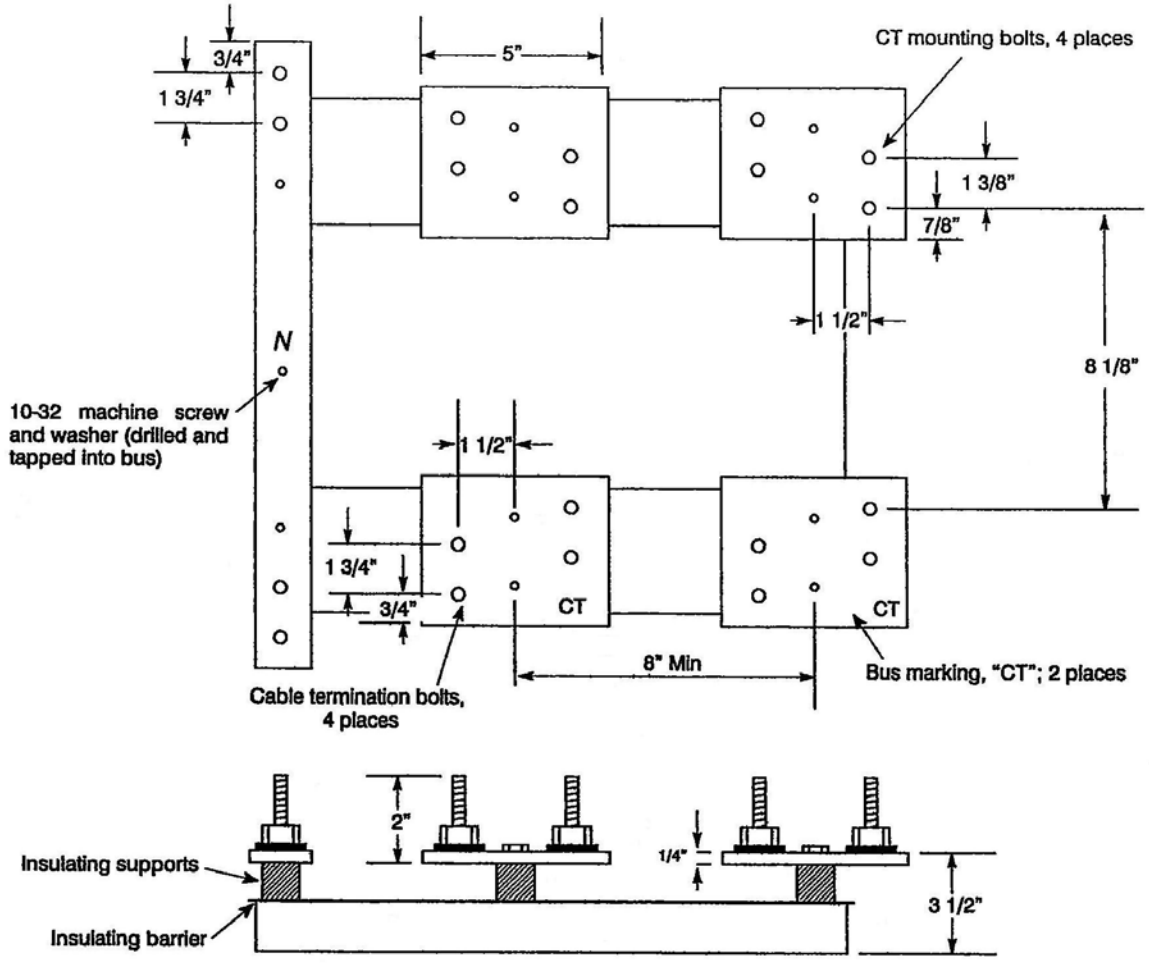
CT Cabinet Installation for Instrument Metering (OH or UG)
Three Phase Shown



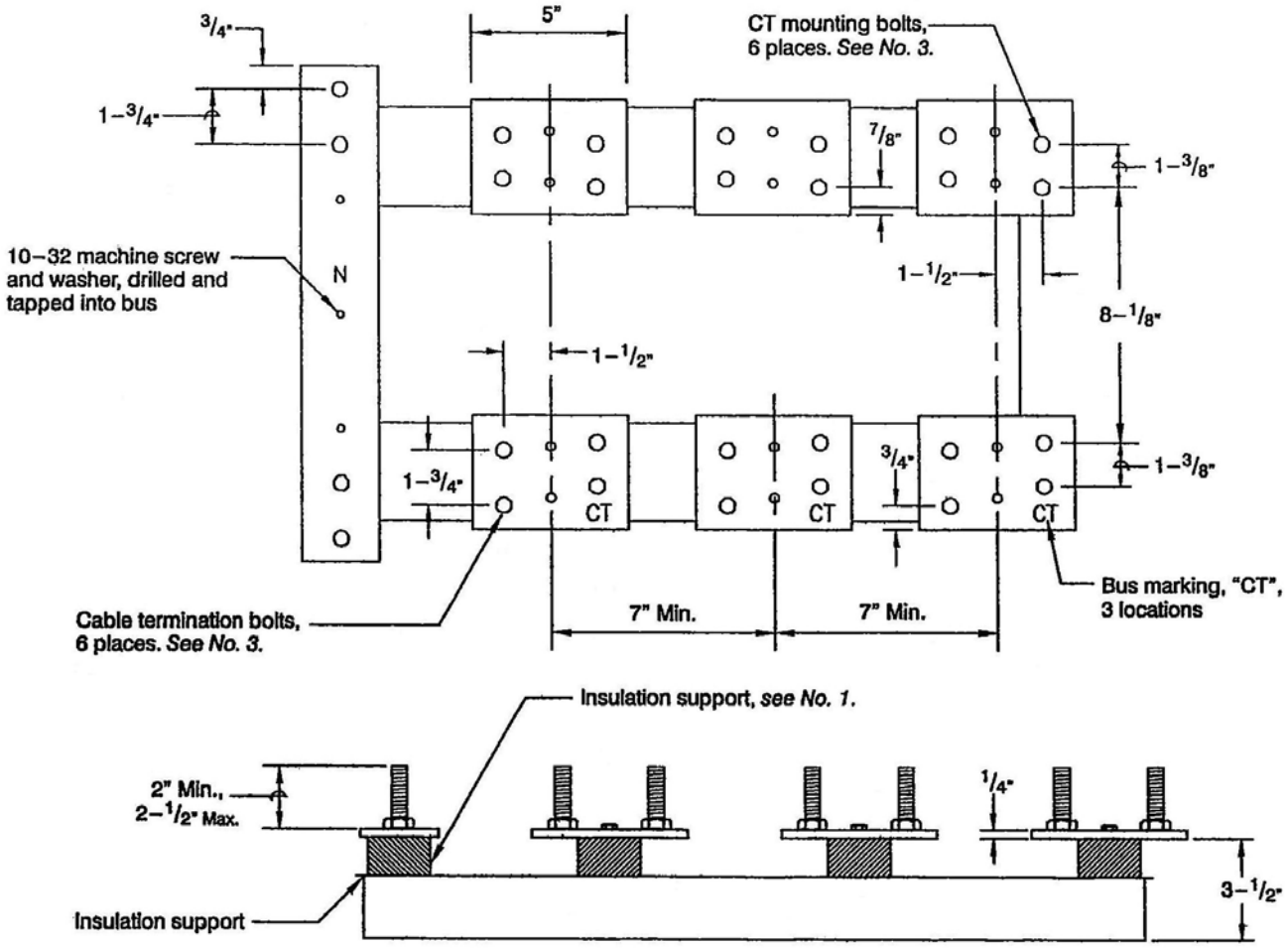
Note:

- **Customer furnished CT cabinet, CT mounting bracket, & remote meter socket.**
- **Hinged door to open away from remote meter.**
- **36"x 48" Min with 48"x 48" required at times (City option)**

Transformer Mounting Base
For installation in a Current Transformer Enclosure
(Single-Phase, Three-Wire, 800-amp Max)
EUSERC 328A, 328B SHOWN



Transformer Mounting Base
For installation in a Current Transformer Enclosure
(Three-Phase, Four-Wire, 800-amp Max.)
EUSERC 328A, 328B SHOWN



Additional Requirements

- Meter sockets shall not be located above or below CT enclosures.
- The top of the CT mounting bracket shall not be more than 6 feet above floor level. The cover shall have factory-installed hinges for side opening, with sealing provisions and shall hold the cover in the open position at 90 degrees or more.
- The City of Cody Electrical Dept. shall be consulted as to placement of line/load conduits.

Section VII
Clearances at Meter Locations

7.01 General:

The Customer shall provide suitable space and provisions for mounting a meter base at a location approved by the City of Cody. Both the Customer and the City share an interest in providing a location of the utmost convenience to both parties for, reading, testing, repairing, disconnecting, and replacing meters. Egress and regress with a minimum violation of privacy is desirable.

7.02 Meter Clearance Dimensions:

The minimum unobstructed working space required in front of a single meter is 78" high, 36" wide, and 36" deep. The minimum working space required with use of current transformers is 78" high, 70" wide, and 48" deep. Meters installed in a cabinet require a minimum space of 48" deep to open the cabinet door. For further detail see NEC 110.26 A. Dimensions do not refer to meters housed in approved switchboards or enclosures. Locate all meters at least 36" horizontally from a gas meter.

The center of any meter socket shall be set no more than 6' above the **finished** grade in front of the meter. **Finished** grade shall be established prior to setting of meter. For gang mounted meter installations see the City Engineer.

7.03 Residential Meters:

Install meters outdoors at a location acceptable to the City of Cody. Avoid locations behind fences or bushes. Avoid locations near gas meters, over stairwells, or over window wells. Install meter 36" from windows or doors (including egress windows).

7.04 Non-residential Meters:

Locate meters outdoors. Any alternative must have prior approval of the City Engineer and allow for access during working hours. Any gated or fenced area must have allowances for a City of Cody lock. Avoid any unsafe locations and a clear zone around meter is required.

7.05 Access:

If a Customer makes a meter inaccessible (in the opinion of the City) the Customer shall, at their expense, either modify the area to provide a safe, unobstructed access to the meter, or move the meter socket to a location acceptable to the City of Cody.

7.06 NESC Clearances for Service Drops and Drop Loops:

750 Volts and Below (Distances in feet)

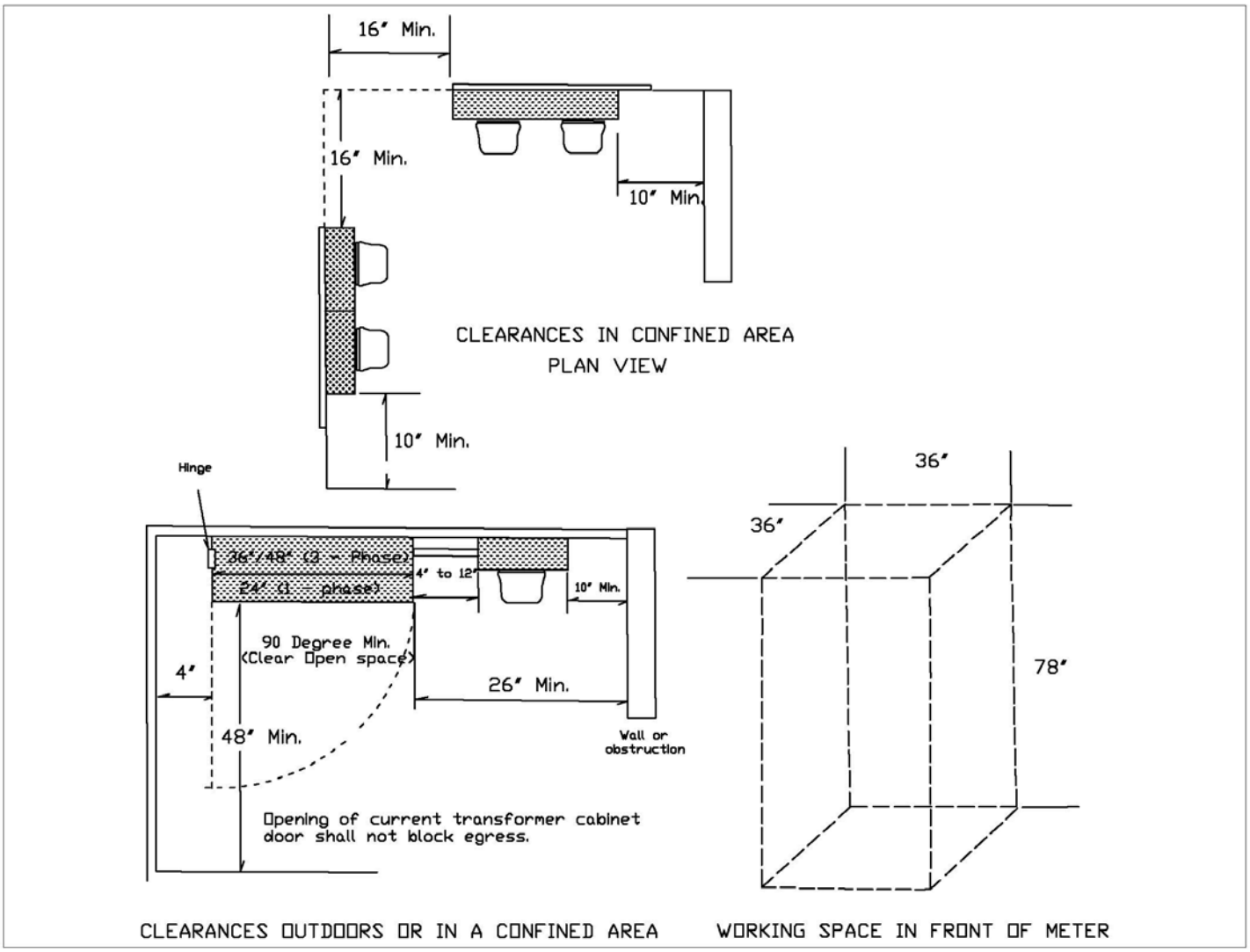
The Customer shall provide a point of attachment which allows NESC minimum clearances to be met in all conditions. A two foot addition to certain NESC values is required by the City to ensure minimum clearances in extreme conditions. These required heights are noted as "clearances required at time of construction" in the table below and are marked with asterisks. Extra long services or other special cases may require clearance additions greater than two feet.

NESC Minimum Clearance		Clearance at Time of Construction
	Service drop clearance (NESC Table 232-1)	
16'	Over roads, streets, and other areas subject to truck traffic ……	18'*
16'	Over or along alleys, parking lots and nonresidential driveways …….....	18'*
16'	Over land traveled by vehicles ……	18'*
	Clearances over residential driveways (NESC Table 232-1)	
16'	If height of building or installation will permit ……	18'*
	If height of building or installation will not permit and is not subject to truck traffic	
12'	- For service drops 120/240 & 208Y/120 volt …….	14'*
10'	- For drip loops of service drops 120/240 & 208Y/120 volts …….	12'*
	Clearances over spaces and ways subject to pedestrian/restricted vehicle traffic only (see note b. on page 21, NESC Table 232-1)	
12'	If height of building or installation will permit ……	14'*
	If height of building or installation will not permit, drip clearances may be reduced:	
10.5'	- For 480Y/277V (see Note 8-b of NESC Table 232-1) ……..	10.5'
10'	- For 120/240 & 208Y/120 volt (see Note 8-d of NESC Table 232-1) ……	10'
	Clearances from buildings for service drops not attached to the building (NESC Table 234-1)	
	Vertical clearances over or under balconies and roofs:	
	- Accessible to pedestrians, if cabled with	
11'	a grounded bare neutral ……	13'*
	- Accessible to pedestrians, if open wire or cabled with	
11.5'	an insulated neutral ……..	13.5'*
	- Not accessible to pedestrians, if cabled with	
3.5'	a grounded bare neutral ……	5.5'*
	- Not accessible to pedestrians, if open wire or cabled with	
10.5'	an insulated neutral ……..	12.5'*
	Horizontal clearances to walls, projections, windows, balconies and areas accessible to pedestrians	
5'	- If cabled with grounded bare neutral …….	5'
	Clearances for service drops attached to a building or other installation (over or along installation to which they are attached; service cable with an effectively grounded bare neutral, NESC 230.C)	
	From the highest point of roofs, decks or balconies over which they pass:	
8'	- If readily accessible (see NESC 234.C.3.d.1) ……..	10'*
3'	- If not readily accessible (see NESC 234.C.3.d.1 exception 1) ……	5'*
	- Above a not-readily-accessible roof and terminating at a (through-the-roof) service conduit or approved support, the service and its drip loops set no less than 18 inches above the roof. No more than 6 feet of the service cable passes over the roof	
1.5'	or within 4 feet if the roof edge (see NESC 234.C.3.d.2) ……	1.5'
	- In any direction from windows designed to open (does not apply to service cable	
3'	above the top level of a window, see NESC 234.C.3.d.2) ……	3'
3'	- In any direction from doors, porches, fire escapes etc (see NESC 234.C.3.d.2) …….	3'

* Two additional feet have been included above the NESC minimums; see the introductory paragraph above.

Clearances Around Meter Installations

These are minimum clearances required around meter installations for safe maintenance and access. A clear path for egress and regress is also required.



Section VIII

Developer Fees and Responsibilities

8.01 Subdivision Development Fees and Responsibilities

The City of Cody requires all new subdivisions and/or commercial developments to be constructed utilizing underground electrical distribution systems unless reasons exist making the use of underground power lines unreasonable. If a development project requires the extension of the City's primary electrical power lines to reach the development property, the full cost of that extension shall be borne by the developer requiring the extension. The electric distribution lines installed within the boundaries of the project shall be installed as follows:

- **System Design Procedures –** The City of Cody's Electrical Services Division shall be provided a copy of the preliminary plat for the subdivision or development so that the City's electrical engineer can design the distribution system needed to supply the project. The developer shall incorporate the City's electrical system design into the final plat of the development.
- **Developer Fees –** The City shall provide an estimate of the total project material cost to the developer based on the final plat. The developer shall submit **100%** of this amount to the City, prior to final approval of the project. Prices on this estimate shall reflect material and equipment costs at the time the estimate is prepared. Any subsequent material cost increases shall be reflected in the final as-built invoice.
- **Developer Responsibilities –** The developer shall provide and install all conduits (grey, electrical grade, schedule 40) for the project, including excavation, padding and backfill of utility trenches. When installing conduit sweeps into City provided ground sleeves for transformers, sectionalizing vaults, secondary pedestals etc., the contractor/developer shall not cut off the sweeps so that City pulling equipment can make a proper seal at the end of the sweep. If the contractor/developer chooses to cut off the sweep, a pull tape must be installed in any conduit run that terminates in a sweep that has been cut off. The labor and equipment charges for this installation shall be born entirely by the developer. The developer's contractor shall (at developer's expense) install all City supplied transformer ground sleeves, vault ground sleeves, secondary pedestals, ground rods and streetlight bases during the conduit installation phase of the project. Conduit provided by the developer shall meet City specifications as to type and size. These specifications are outlined in Section 5, page 13 of this Electric Distribution Standards Manual.
- **City Responsibilities –** Without charge to the developer, the City shall install all primary and secondary power cable, all transformers, cabinets and streetlight poles and luminaires. The City will order and supply all electrical material and equipment other than conduit.
- **Project Completion –** Upon completion of the project, the City's electrical engineer shall produce an invoice using as-built figures giving the actual cost of the project. If the as-built price is higher than the original estimate, the difference shall be billed to the developer. If the as-built price is lower than the original estimate, the City shall refund the difference to the developer.

8.02 Underground Service Connection Fees

- **For All Service Sizes**: The Customer shall provide and install all conduit and cable from the City's transformer or service pedestal to the Customer's service equipment. This will include the cost of the service riser and weather head and in the case of large commercial services the provision and installation of a secondary connection cabinet between the City's transformer and building service equipment. The Customer is responsible for all cable and connectors to attach secondary cabling to the City transformer.
- **To re-establish a service to a lot that previously had a service:** The Customer shall be responsible for the entire cost of that service. Contact the Electrical Services Department.
- **For service upgrades:** If the customer moves the electrical meter equipment to the structure from a position in the alley or on the property line, the customer shall pay the full cost of relocating the service. It is recommended that the old service conductors be replaced from the prior point of connection to the utility to the new meter location on the structure. If the Customer installs new service conductors in conduit per this recommendation, the City will maintain and repair the new service lateral. If the Customer re-uses the old service lateral conductors, the City will not maintain the old service lateral.

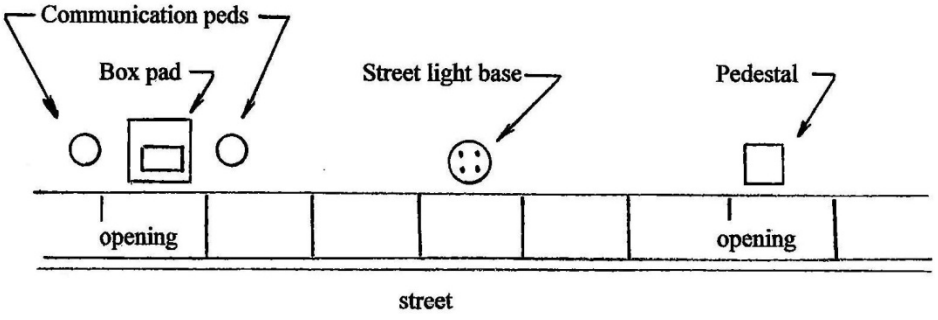
8.03 Overhead Service Connection Fees

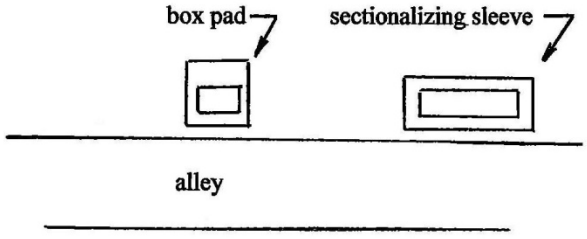
- **For All Service Sizes:** For all services, the City will install the service drop cable and bill the Customer for the material and installation costs.
- **To re-establish a service to a lot that previously had a service:** The Customer shall be responsible for the entire cost of that service. Contact Electrical Services Department.

Section IX
Placement of City Facilities within a Subdivision

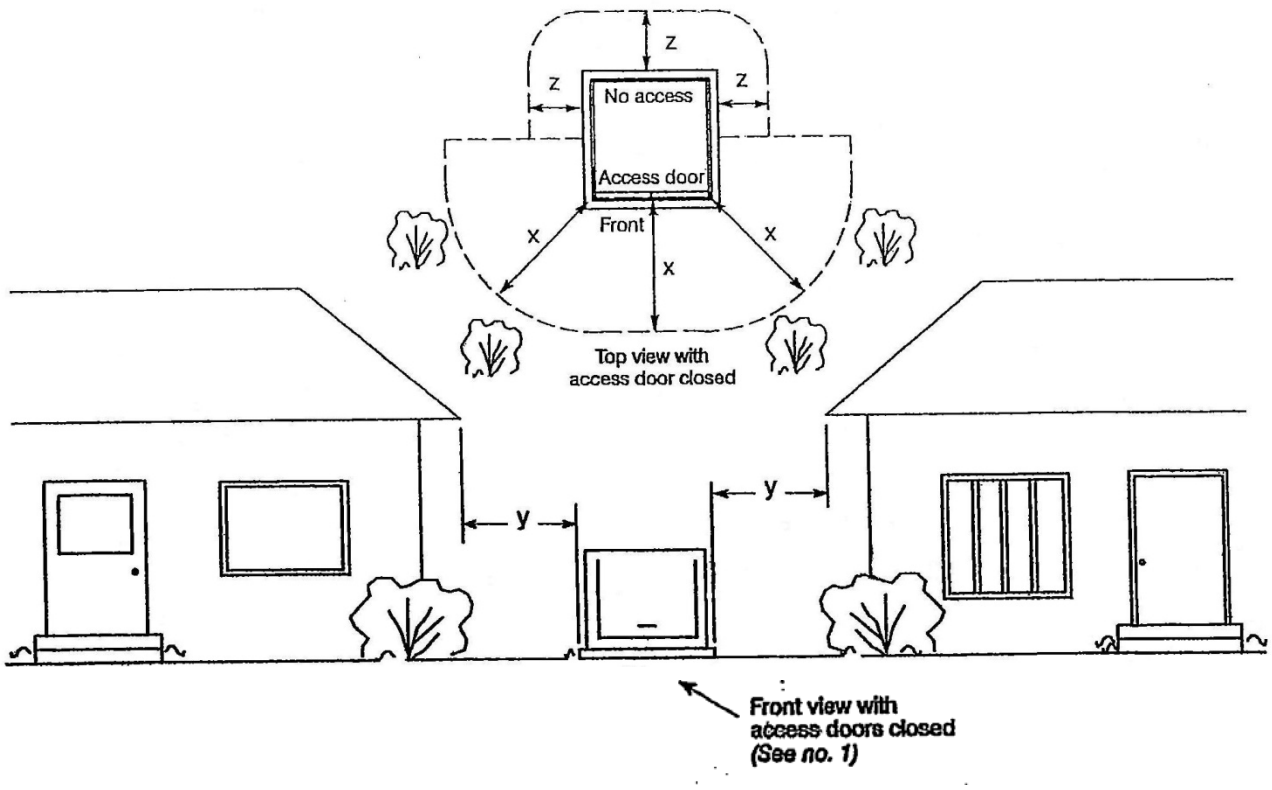
9.01 Transformer Box Pads, Pedestals, Sectionalizing Cabinet Sleeves, Streetlight Bases

- Placement to be as specified by Engineering Drawings
- Opening of each unit to face sidewalk, roadway or alley traffic lane
- Ground rods shall be installed leaving ground wire protruding into vaults.
    - Suggestion – wrap ground wire tail around conduit sweeps
- Per International Fire Code 508.5.5, "a three foot clear space shall be maintained around the circumference of fire hydrants ….."
- Communications Pedestals are to be placed 2 feet away on either side of the City's electrical equipment
- Streetlight bases are to be placed behind the sidewalk with the bolt pattern placed in line with the street roadway.
- Conduits shall be cut off so only 3 inches of the conduit is above the ground surface inside of a secondary pedestal. *Conduit sweeps are not to be cut off inside transformer box pads or sectionalizing cabinet ground sleeves.*





9.02 Minimum Clearances For Pad Mounted Equipment



MINIMUM DISTANCE REQUIRED FROM PAD

x = 10 ft. clear area in front of, any equipment access door or opening to allow the use of hot sticks (See dimensions in drawing above, and in requirement 1 below.)

y = 8 ft. from any structure or roof overhang consisting of combustible material. See dimensions in the drawing above.

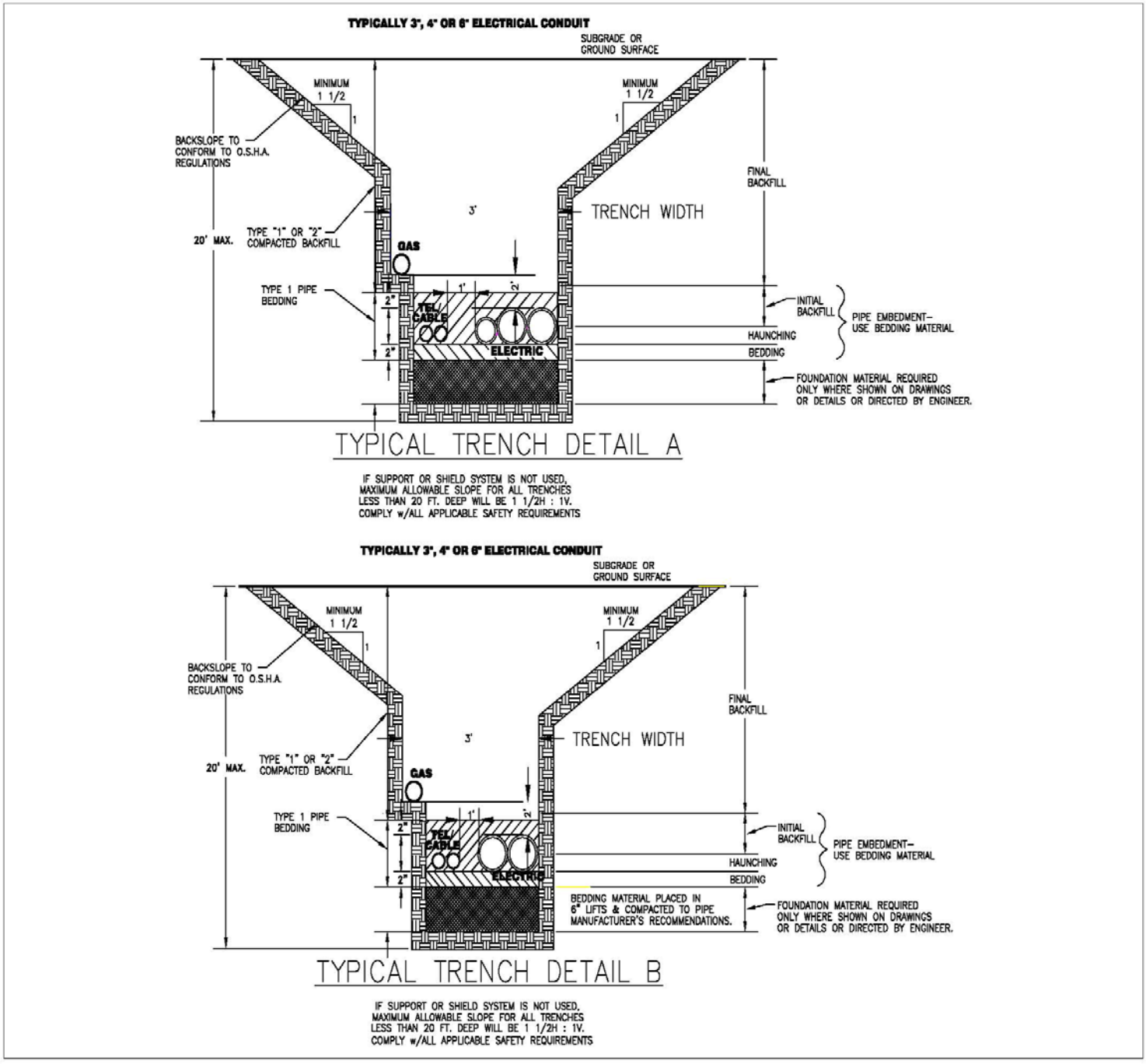
Z = 3 ft. clear area on non-access sides of the equipment to allow work space. See dimensions in the drawing above.

Requirements:

1. Locate padmounted equipment with access doors away from building walls or other barriers to allow safe working practices. If the equipment access side must face a wall, allow 10 feet for working clearance. No vegetation or trip hazards in this work space are permitted.
2. The City reserves the right to remove any vegetation that does not meet the above clearances and will not reimburse the Customer for any removed vegetation.

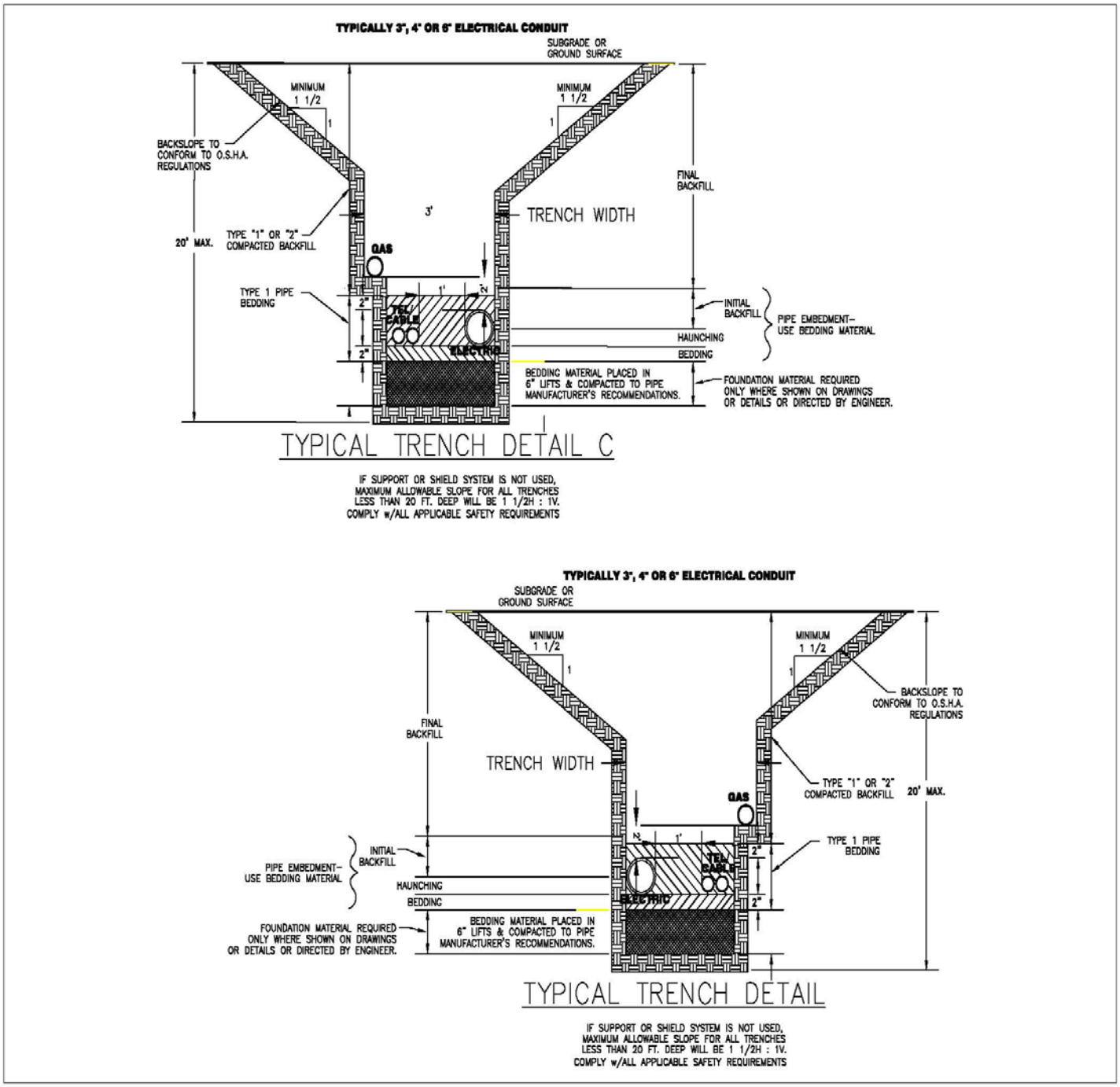
9.03 – Joint Trenching Details

- Trench Detail A – Three electric utility primary conduits, gas pipe and multiple communications conduits in same trench.
- Trench Detail B – Two electric utility primary conduits, gas pipe and two communications conduits in same trench.

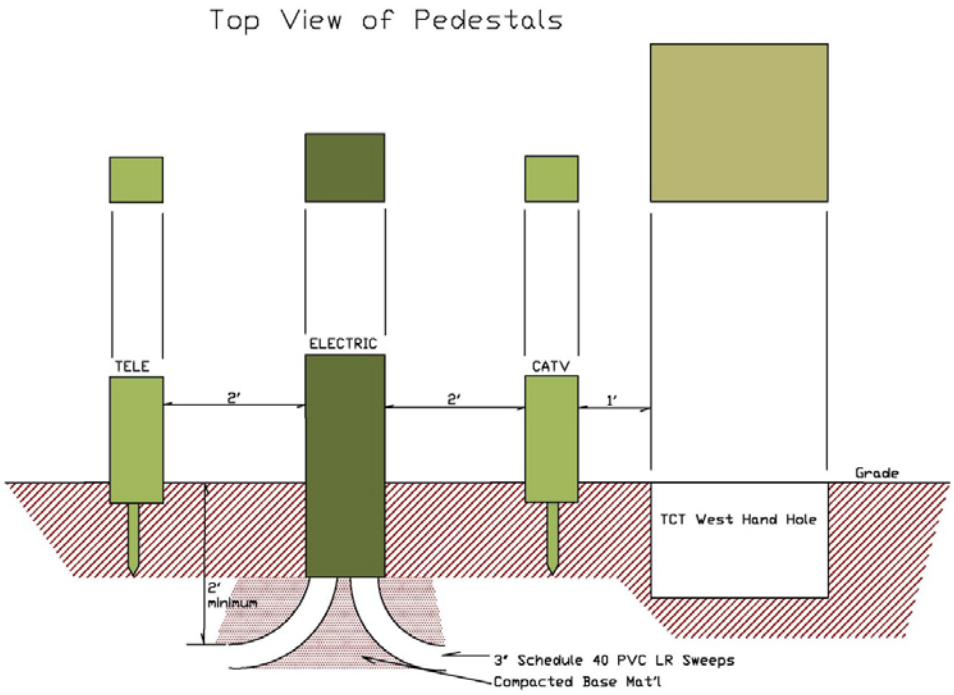


9.03 Joint Trenching Details (cont'd)

- Trench Detail C – Single electric utility conduit, single gas pipe and two communications conduits in same trench
  - Alternate trench detail

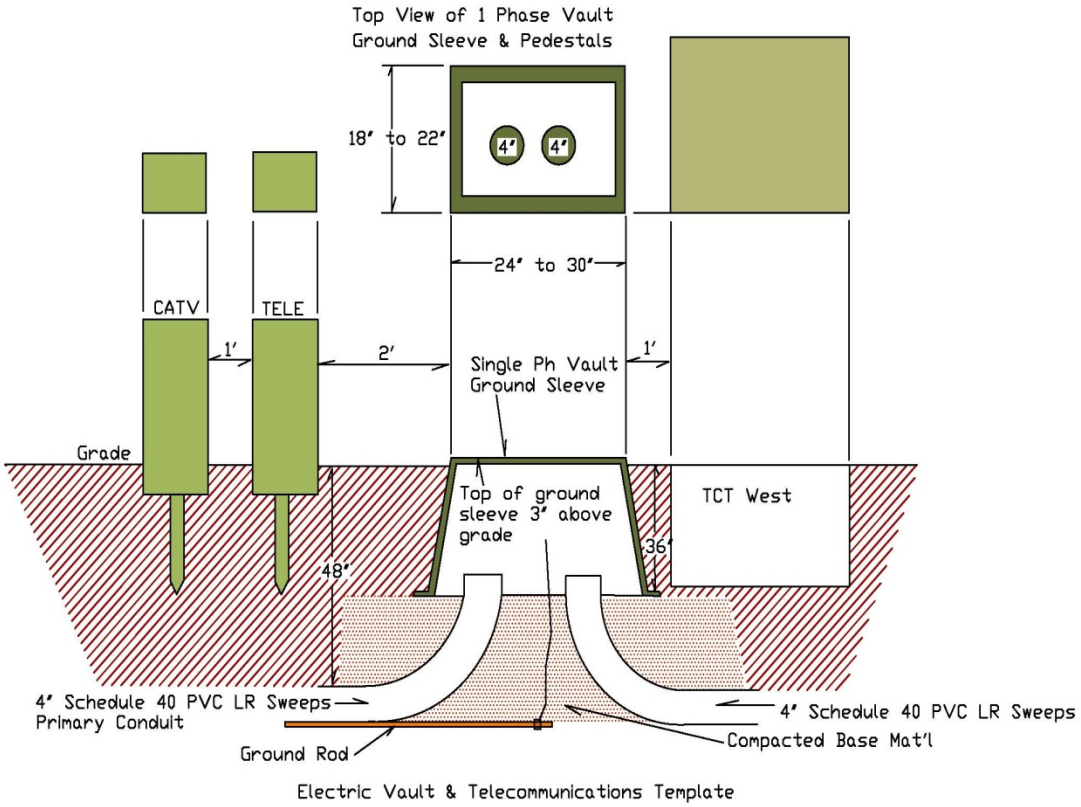


9.04 Secondary Pedestal Photograph (typical) and Installation Template



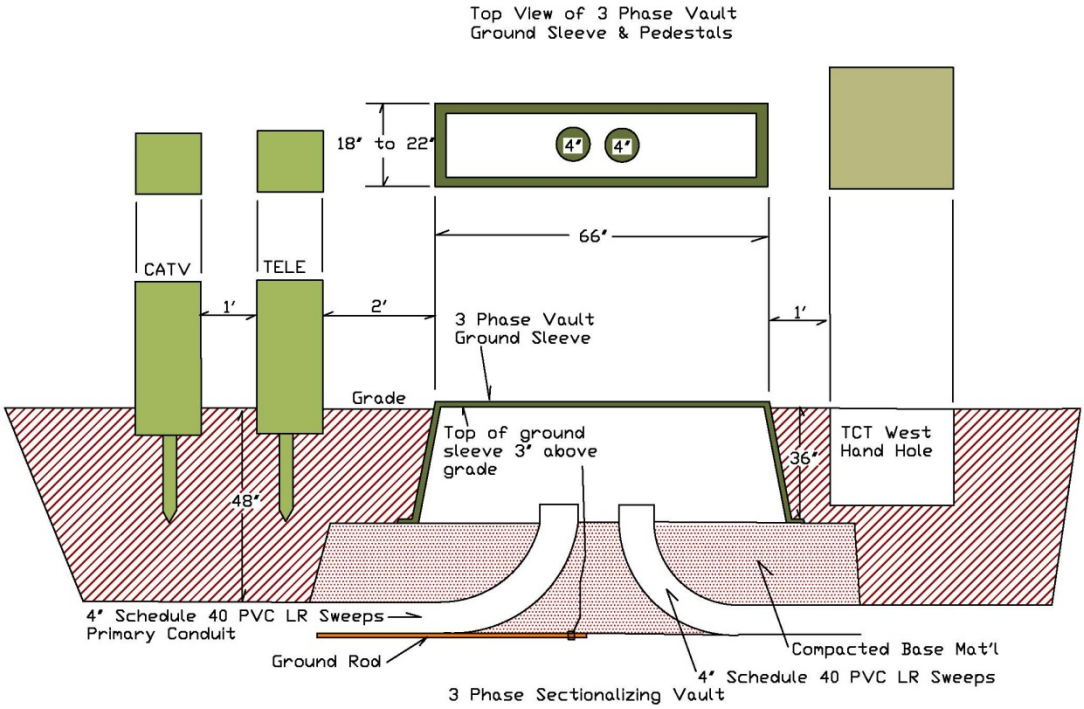
Secondary Pedestal & Telecommunications Template

9.05 Single Phase Sectionalizing Cabinet Ground Sleeve Photo (typical) and Installation Template

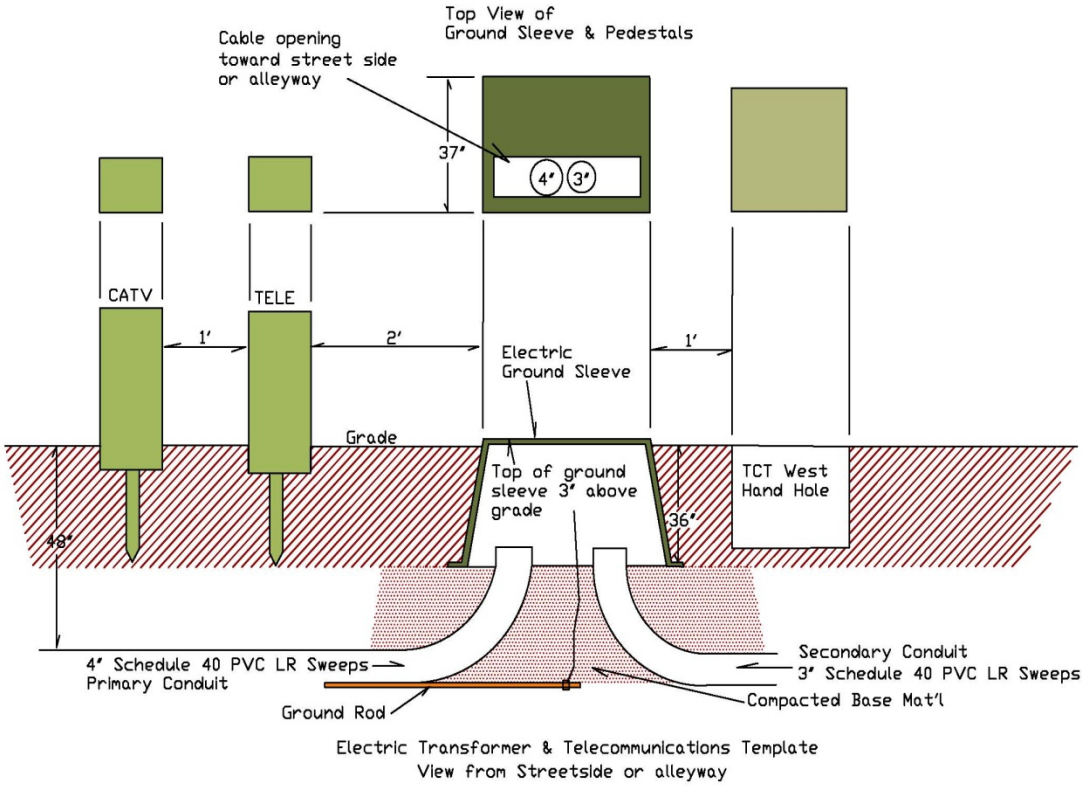


Electric Vault & Telecommunications Template

9.06 Three-Phase Sectionalizing Cabinet Ground Sleeve Photograph (typical) and Installation Template



9.07 Padmount Transformer Box Pad Photograph (typical) and Installation Template



9.08 Overhead Communications Location Assignments on Utility Poles – Whenever possible, the attachment of overhead communications facilities on utility poles for current communications utilities operating in the City of Cody shall follow the following order:

1) Charter Communications – Attachment Point 40” below the lowest power attachment.
2) TCT West Communications – Attachment Point 12” to 14” below Charter attachment.
3) CenturyLink Communications – Attachment Point 12” to 14” below TCT West attachment.

Section X
ELECTRICAL PERMITS

ELECTRICAL PERMITS WILL BE ISSUED TO ELECTRICAL CONNTRACTORS HOLDING A CURRENT CITY OF CODY LICENSE. OWNERS OF SINGLE FAMILY DWELLINGS MAY BE ISSUED PERMIT. ALL PERMITS REQUIRE INSPECTIONS BASED ON THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE.

SERVICE UPGRADES

- THRU 200 AMP $25.00
- OVER 200 AMP $50.00

NEW SINGLE & TWO FAMILY DWELLINGS

- INCLUDES PERMANENT SERVICE, ROUGH-IN, AND FINAL INSPECTIONS. $50.00

DWELLING ADDITIONS

- WITH NEW SERVICE UPGRADE $50.00
- NOT REQUIRING NEW SERVICE $25.00
- SMALL JOBS (rewire, add circuits, repairs etc.) $25.00

REINSPECTIONS:

- REQUIRING REMOVAL OF RED TAGS $25.00

COMMERCIAL WIRING PERMITS

INCLUDES PERMANENT SERVICE, ROUGH-IN AND FINAL INSPECTIONS.

FEES SHALL BE COMPUTED ON THE DOLLAR VALUE OF THE ELECTRICAL INSTALLATION, INCLUDING FIXTURES AND INSTALLATION COSTS THEREOF, AS FOLLOWS:

- MINIMUM PERMIT $ 25.00
- $1,001-$5,000 $ 50.00
- $5,001-$25,000 $100.00
- $25,001-$50,000 $150.00
- $50,001-$100,000 $250.00
- $100,001 and over $250.00 FOR THE FIRST $100,000 PLUS $1.00 FOR EACH $1,000 OVER

REINSPECTIONS:

- REQUIRING REMOVAL OF RED TAGS $ 50.00

Note: Contact the City of Cody Building Department to verify permit fees. This manual is updated annually and may not reflect the latest changes in permit fees.

Section XI

NET METERING POLICY

11.01 – General Information

The City of Cody Electric Division allows net metering installations for renewable energy sources with a maximum capacity of 25 kW. Any request for larger installations will have to be cleared through the Wyoming Municipal Power Agency as well as the City Council. Cody is a member of WMPA and as such, is bound to an all-requirements power contract with WMPA. Larger installations must negotiate an agreement with WMPA for installation on the City Electrical Distribution System. If a larger system is being contemplated by a Customer, contact information for WMPA can be obtained from the Administrative Services Department at Cody City Hall.

11.02 – Metering Requirements

1. The City of Cody will supply a dual reading meter to allow measurement of both City supplied electrical service and Customer supplied excess electrical energy that is fed back onto the City's distribution system. The Customer will be billed for the cost of the meter by the City.
2. The Customer shall provide an automatic disconnect device that will prevent backflow of power onto the City's electrical grid in the event that City service to the meter is interrupted. This device should provide a visible open point to verify that the renewable energy source or Customer generation equipment is not back-feeding power onto the City grid. If the automatic disconnect device does not provide a visible open, a manual disconnect device must be installed that will provide the visible open.

11.03 – Net Metering Energy Reconciliation

1. Both registers on the dual reading meter will be read each month. The energy generated by the Customer shall be deducted from the energy supplied to the Customer by the City and the Customer will be billed or credited with the difference at the retail rate.

Section XII

SECURITY LIGHTING POLICY

12.01 – General Information

The City of Cody will provide unmetered security lighting for Customers for residential of commercial use under the following guidelines:

12.02 – Security Light Applications Procedures

1. Security light installation requests must be submitted in writing to Administrative Service with the following information provided with the request:

   a. Name and contact information for Customer requesting the light.
   b. Site plan showing location of requested security light
   c. Size (in watts) of requested light
   d. Orientation of security light (direction light arm will point)
   e. Requested date for installation of light

12.03 Customer Responsibilities

1. Customers requesting unmetered security lights shall be responsible for:
    a. Full cost of material and installation of the security light, pole if required and wiring.
    b. Monthly charge based on the wattage rating of the security light as listed in Article III Section 9-13 (f) of the City Ordinance.
    c. Notification to the City of Cody when repairs are required for the security light. Such notification should be made to Administrative Services at the Cody City hall. Administrative Services shall then issue a service order to the Electric Division for repair of the security light.

12.04 The City of Cody Responsibilities

1. The City of Cody will:
    a. Provide a written estimate of the material and installation costs associated with the security light after receiving a security light request.
    b. Perform all necessary repairs to the security light at no cost to the Customer upon receiving a service order from City Hall for repair of the security light.
    c. Retain ownership of the security light and any other material or equipment required for installation of the security light.